(Credits: Theory-04, Practicals-02)

SEMESTER I

I. MAJOR COURSE –MJ 1:

Marks: 15 (5 Attd. + 10 SIE: 1Hr) + 60 (ESE: 3Hrs) = 75

Pass Marks: Th (SIE + ESE) = 30

Instruction to Question Setter for

Semester Internal Examination (SIE 10+5=15 marks):

There will be **two** group of questions. Question No.1 will be **very short answer type in Group A** consisting of five questions of 1 mark each. **Group B will contain descriptive type** two questions of five marks each, out of which any one to answer.

The Semester Internal Examination shall have two components. (a) One Semester Internal Assessment Test (SIA) of 10 Marks, (b) Class Attendance Score (CAS) of 5 marks. Conversion of Attendance into score may be as follows: (Attendance Upto 45%, 1mark; 45<Attd.<55, 2 marks; 55<Attd.<65, 3 marks; 65<Attd.<75, 4 marks; 75<Attd, 5 marks)

End Semester Examination (ESE 60 marks):

There will be two group of questions. Group A is compulsory which will contain three questions. Question No.1 will be very short answer type consisting of five questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

GEOMORPHOLOGY

Theory: 60 Lectures

Course Learning Outcomes:

After the completion of course, the students will have ability to:

- 1. Understand the functioning of Earth systems in real time and analyze how the natural and anthropogenic operating factors affects the development of landforms
- 2. Distinguish between the mechanisms that control these processes
- 3. Assess the roles of structure, stage and time in shaping the landforms, interpret geomorphological maps and apply the knowledge in geographical research.

Course Content:

- 1. Geological Time Scale
- 2. Geomorphology: Nature and Scope, Earth: Interior Structure and Isostasy: Concept of Airy and Pratt
- 3. Earth Movements: Continental Drift Theory, Types of Folds and Faults, Earthquakes
- 4. Geomorphic Processes: Gradation, Mass Wasting, Cycle of Erosion (Davis).
- 5. Evolution of Landforms (Erosional and Depositional): Fluvial, Karst, Aeolian & Glacial

Reference Books:

- 1. Bloom, A. L., (2003): Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, Prentice-Hall of India, New Delhi.
- 2. Singh Savindra(2015): Bhuakriti vigyan ka Swarup, Prayag Pustak Bhawan, Allahabad
- 3. Bridges, E. M., (1990): World Geomorphology, Cambridge University Press, Cambridge.
- 4. Christopherson, R. W. and Birkeland, G. H., (2012) Geosystems: An Introduction to Physical

- Geography (8th edition), Pearson Education, New Jersey.
- 5. Das Gupta, A and Kapoor, A.N., (2001) Principles of Physical Geography, S.C. Chand & Company Ltd. New Delhi
- 6. Dayal, P., (1996) A Text book of Geomorphology. Shukla Book Depot, Patna.
- 7. Huggett, R.J. (2007) Fundamentals of Geomorphology, Routledge, New York.
- 8. Kale, V. S. and Gupta A., (2001): Introduction to Geomorphology, Orient Longman, Hyderabad.
- 9. Khullar, D.R., (2012)Physical Geography, Kalyani Publishers, New Delhi.
- 10. Mal, Suraj, Singh, R.B. and Huggel, Christian (2018): Climate Change, Extreme Events and Disaster Risk Reduction, Springer, Switzerland, pages 309.
- 11. Selby, M.J., (2005): Earth's Changing Surface, Indian Edition, OUP
- 12. Singh, S (2009):Bhautik Bhugol ka Swaroop (Hindi), Prayag Pustak, Allahabad.
- 13. Skinner, Brian J. and Stephen C. Porter (2000), The Dynamic Earth: An Introduction to Physical Geology, 4th Edition, John Wiley and Sons.
- 14. Strahler, A. H. and Strahler, A N., (2001):Modern Physical Geography (4/E), John Wiley and Sons, Inc., New York.
- 15. Summerfield M. A. (2013): Global Geomorphology, Routledge, New York
- 16. Thornbury, W. D., (2004): Principles of Geomorphology, Wiley, New York.
- 17. Tikka, R N (1989): Bhautik Bhugol ka Swaroop (Hindi), Kedarnath Ram Nath, Meerut

.....